

Design-Build Industry Forum

I-16 Widening From I-95 to I-516

(PI 0012757)

I-16 @ I-95 Interchange Reconstruction

(PI 0012758)

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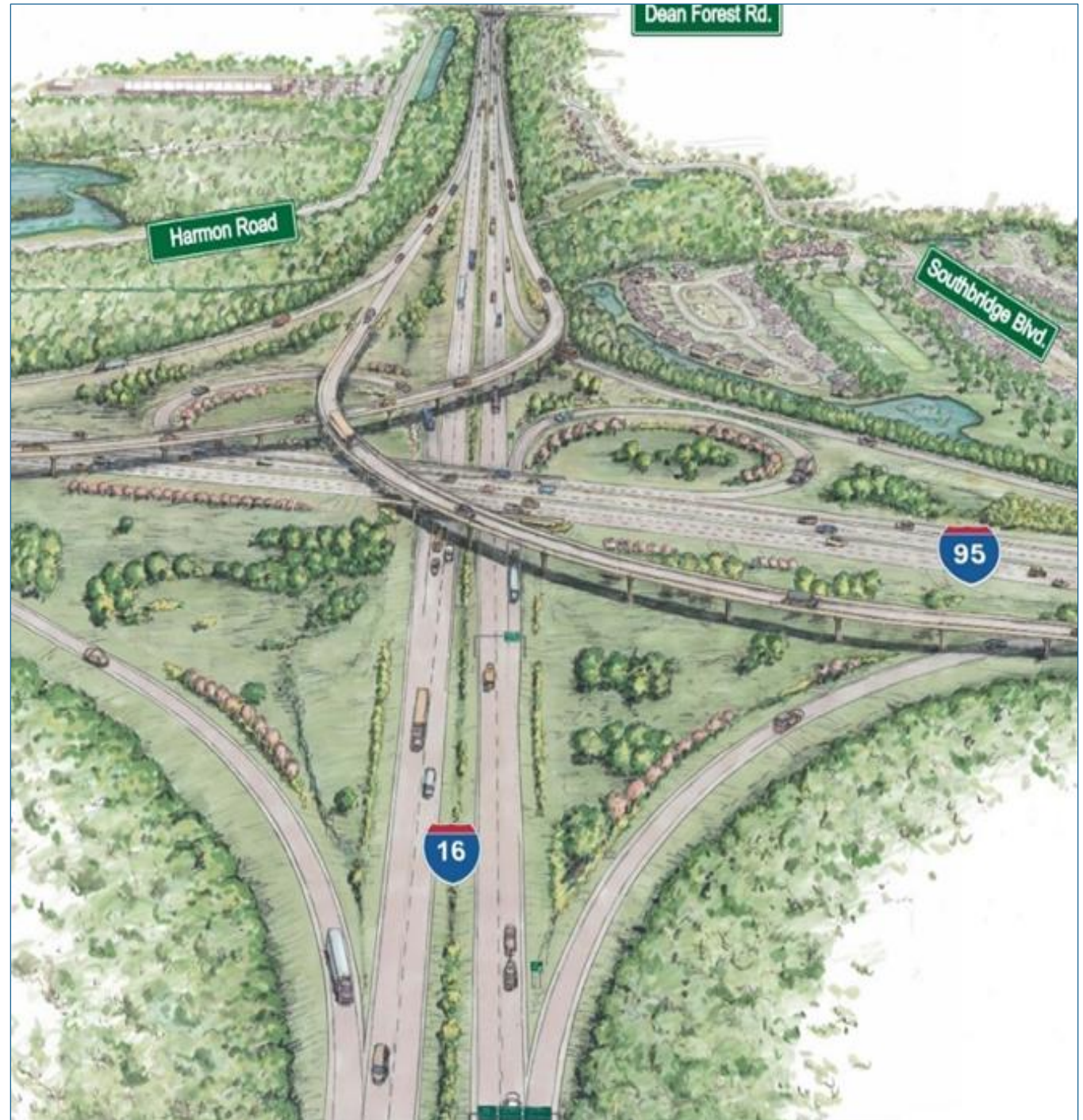
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Senior Design-Build Project Manager

November 13, 2017



Disclaimer Statement

At this meeting the Department will provide information about each project's delivery goals, anticipated scope, anticipated Design-Build procurement process, and potential risks.

Participants will be encouraged to ask questions during this meeting; however, **any information provided by the Department shall be considered as informational only and is subject to change.**

Major Mobility Investment Program – Delivering the Governor’s Promise to Georgians



Today's Agenda

- MMIP Overview
- Disadvantaged Business Enterprise (DBE)
- Design-Build Project
 - I-16 Widening (From I-95 to I-516)
 - I-16 @ I-95 Interchange Reconstruction
- Design-Build Procurement
 - Design-Build Contract Template Updates
 - Evaluation Criteria
- Open Discussion

11 MMIP Projects



**3 Major
Interchange
Projects**



**4 Major Express
Lanes Projects**



**3 Major Interstate
Widening Projects**



**1 Commercial
Vehicle Lanes
Project**

MMIP Projects Map

Interchange Reconstruction:

1. I-16/I-95 Interchange
2. I-285/I-20 West Interchange
3. I-285/I-20 East Interchange

Express Lanes:

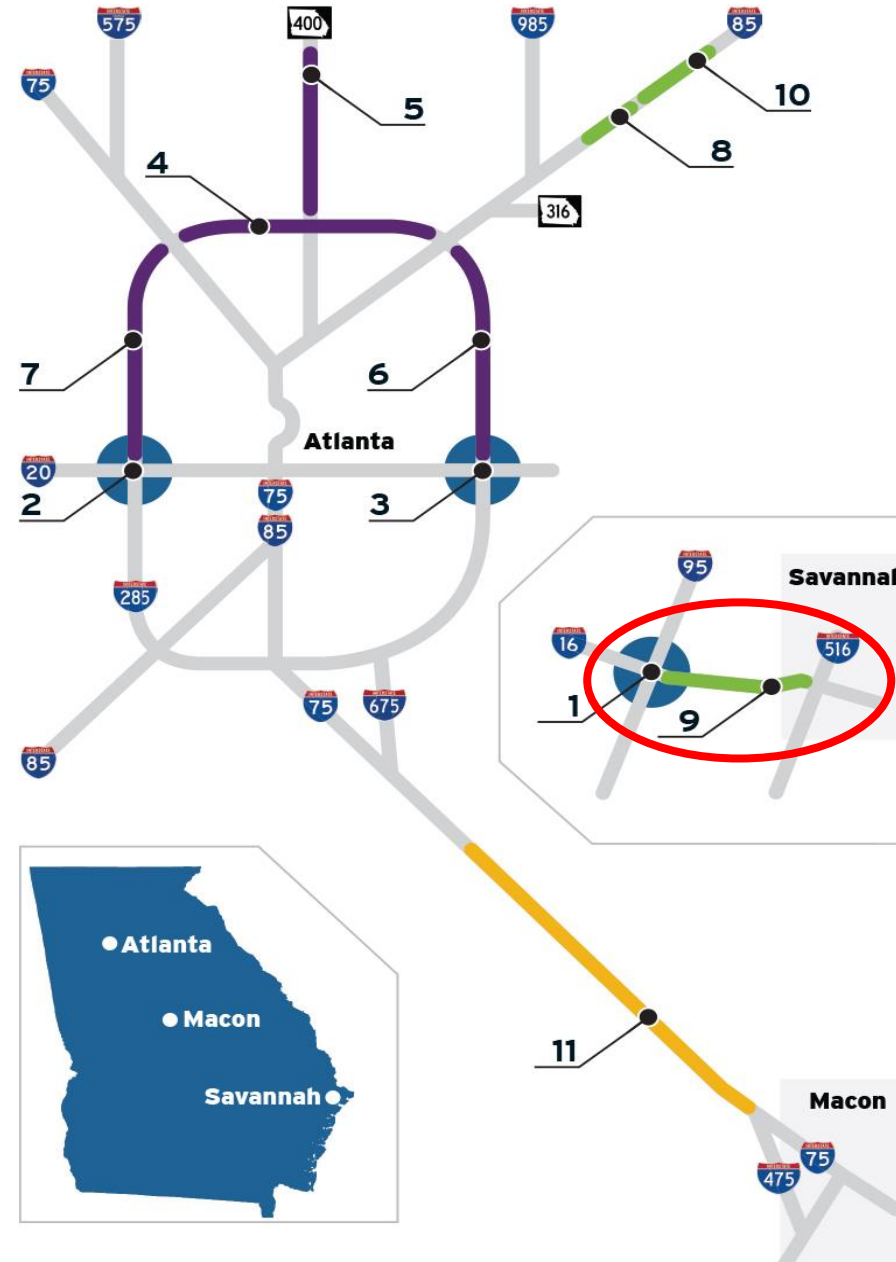
4. Revive 285 Express Lanes
I-75 to I-85
5. SR 400 Express Lanes:
I-285 to McFarland Rd.
6. I-285 East Wall Express Lanes
I-85 to I-20
7. I-285 West Wall Express Lanes
I-20 to I-75

Interstate Widening:

8. I-85 North Widening
Hamilton Mill Rd. to SR 211
9. I-16 Widening
I-95 to I-516
10. I-85 North Widening
SR 211 to US 129

Commercial Vehicle Lanes:

11. Commercial Vehicle Lanes
SR 155 to I-475

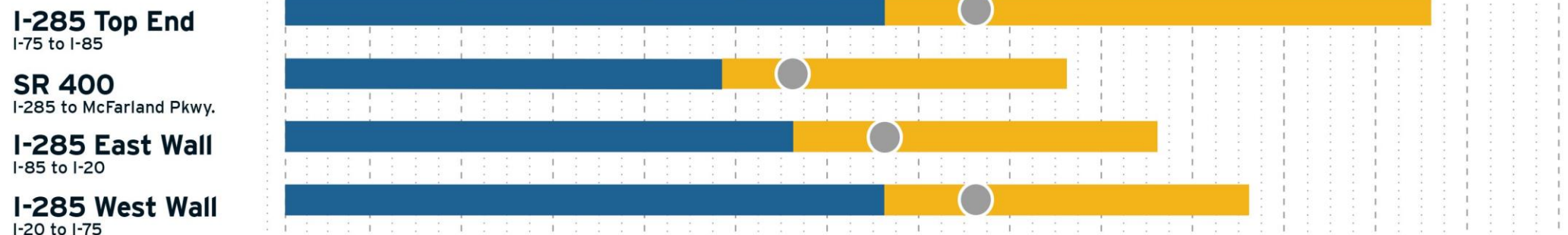


MMIP Schedule

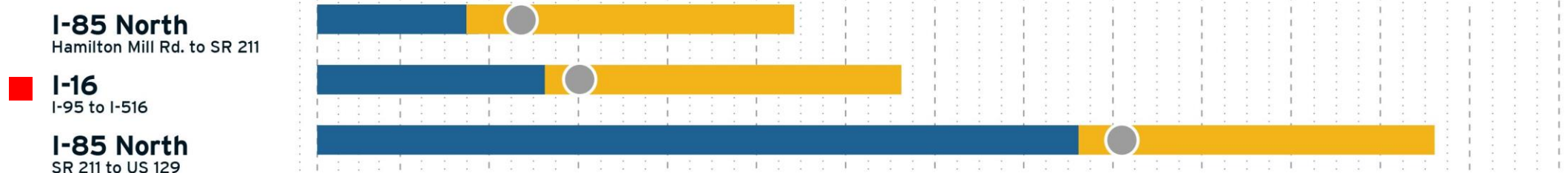
Interchange Reconstruction:



Express Lanes:



Interstate Widening:



Commercial Vehicle Lanes:



10/06/2017 | Dates represented are calendar years

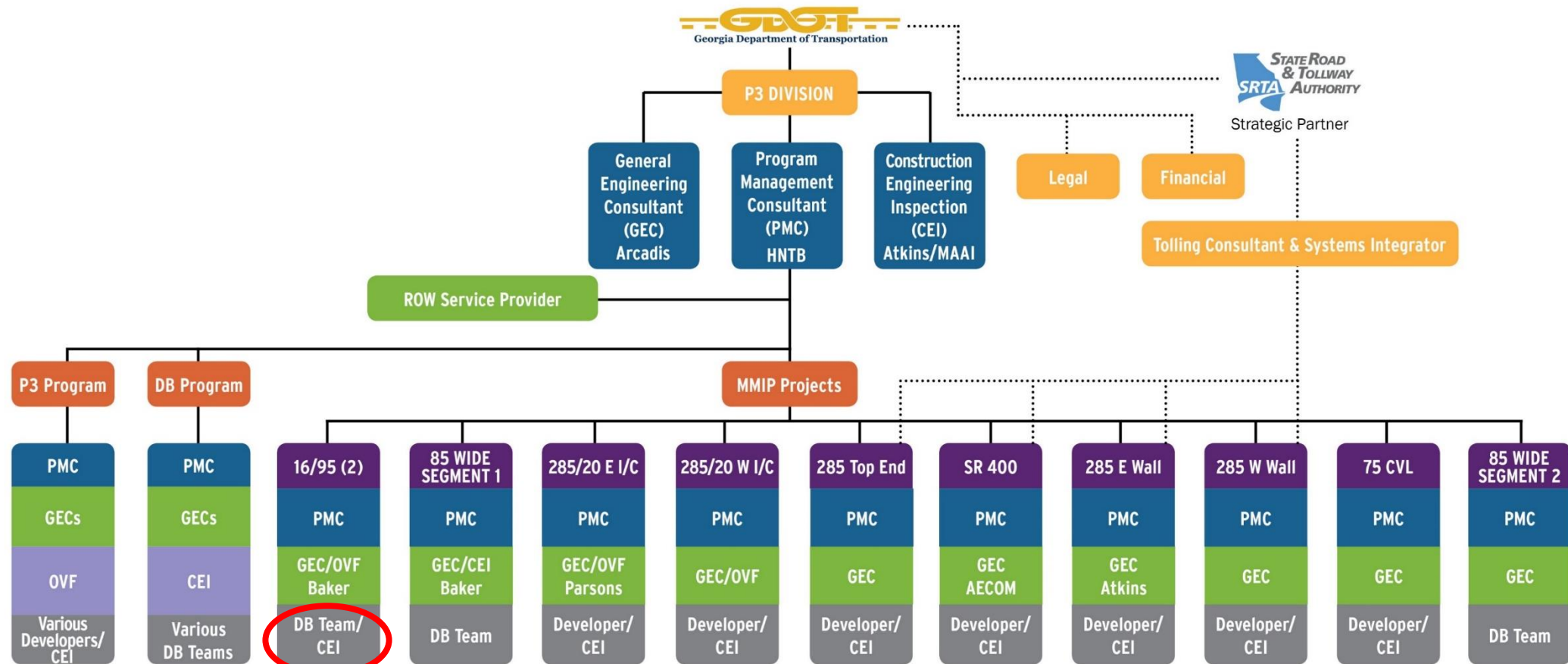


The Design-Build process compresses project schedules by overlapping activities in the design and construction phases.

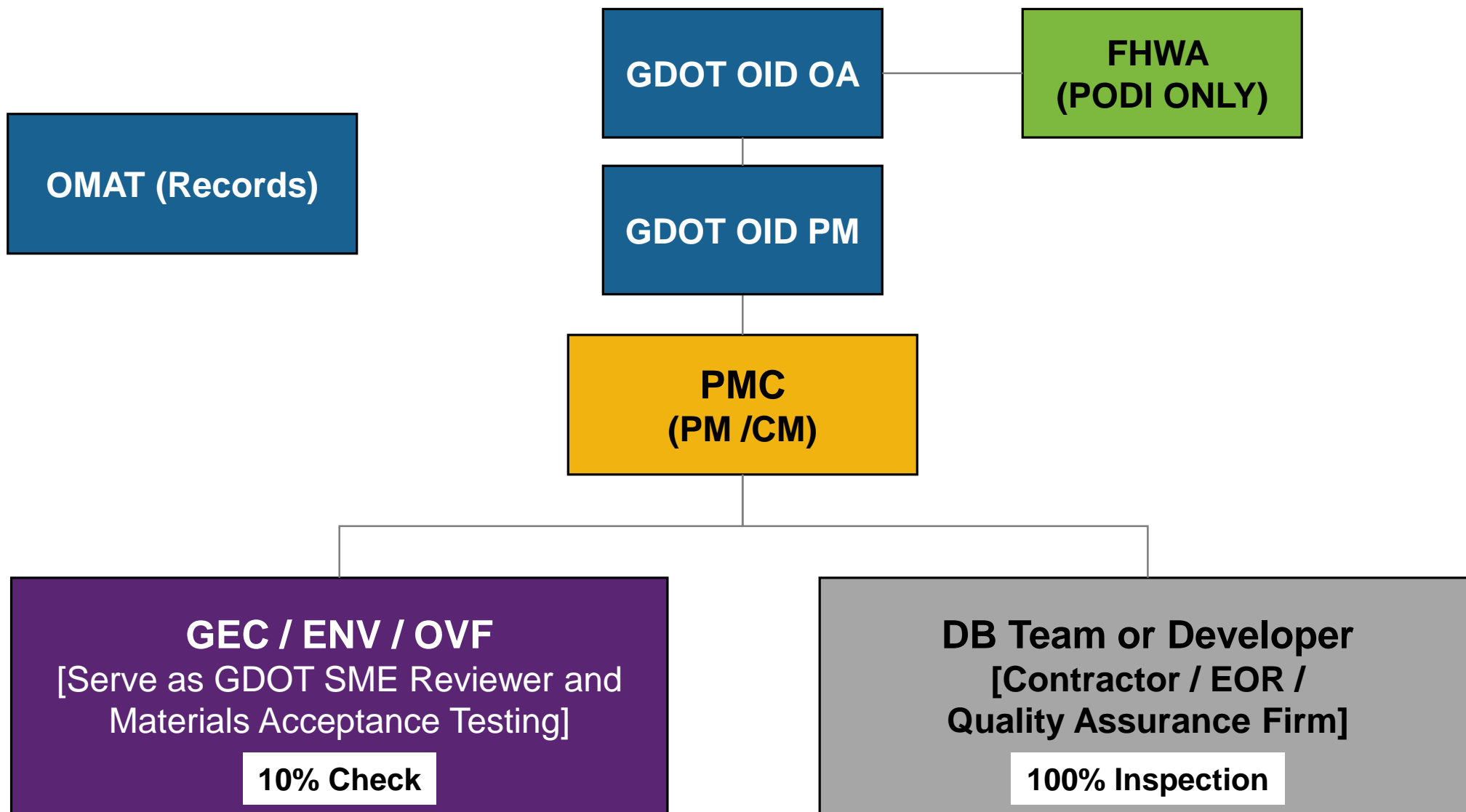
Consultant and Developer Opportunities

	Owners Rep			Developer Team
	Public Notice Advertisement (PNA)	Request for Qualifications (RFQ)	Awarded	Anticipated Letting
Innovative Delivery				
Program Management Consultant (PMC)	✓	✓	✓	N/A
Programmatic General Engineering Consultant (GEC)	✓	✓	✓	N/A
Programmatic Construction Engineering & Inspection (CEI)	✓	✓	✓	N/A
Right-of-Way Service Provider	✓	✓	December 2017	N/A
Major Mobility Investment Program				
I-85 Widening (Hamilton Mill Rd. to SR 211) (Post Let)	✓	✓	✓	✓
I-16/I-95 Interchange and Widening (Post Let)	✓	✓	✓	Summer 2018
SR 400 Express Lanes	✓	✓	✓	Winter 2020
I-285 East Wall Express Lanes	✓	✓	✓	Summer 2021
I-285/I-20 East Interchange	✓	✓	✓	Fall 2021
I-285 West Wall Express Lanes	January 2018	March 2018	Summer 2018	Summer 2022
I-285/I-20 West Interchange	January 2018	March 2018	Summer 2018	Summer 2022
I-285 Top End Express Lanes	✓	✓	February 2018	Summer 2022
I-75 Commercial Vehicle Lanes	✓	✓	February 2018	Summer 2024
I-85 Widening (SR 211 to US 129)	December 2022	January 2023	Summer 2023	Summer 2024

Program Delivery Model



Organizational Chart



DBE Outreach



DBE Outreach

Georgia DOT held a DBE Outreach Forum in the Savannah Area on June 28, 2017. The following DBE firms attended:

- Clark Creative
- Coastline Consulting
- Cox Creative Production & Const.
- Economy Masonry
- First Cuts Landscapes
- Glover's Masonry
- Lamel Services
- LG2 Environmental Solutions, Inc
- MBM Trucking
- On Grade Contracting
- SGA Erosion Control
- Xander Consulting

Contracting

- **1 Design-Build Contract (Office of Innovative Delivery)**
 - Combines preconstruction-related services with construction services into **one contract**
 - Allows the contractor to participate in the project's design in an effort to **reduce costs, improve communication and expedite project delivery**
 - Governed by
 - 23 Code of Federal Regulations (CFR) Part 636
 - Georgia Code Section 32-2-81 (*Enacted 2004*)
 - Board Rules, Chapter 672-18 (*Adopted 2006 & 2013*)

Opportunity Conflict



GEC

GEC prime and
major sub-consultants
on any given project

**cannot
participate**
with a Design-Build
Team
on the same project



**Design-Build
Team**

Potential Conflicts of Interest

1. DB Team Lead Contractor
2. DB Team Lead Designer
3. DB Team Subcontractor
4. DB Team Design Consultant
5. DB Team CEI (QA)
6. DB Team Independent Reviewer

Different Team

Allowable		Not Allowable
1 and 3	2 and 6	1 and 1
1 and 5	3 and 5	2 and 2
1 and 6	4 and 5	
2 and 4	4 and 6	
2 and 5	5 and 6	

Same Team

Allowable	Not Allowable
1 and 6	1 and 5
2 and 6	2 and 5
4 and 6	3 and 5
5 and 6	4 and 5

* Formal request for conflict determination must be submitted in writing to Procurement Officer

Design-Build Project

- I-16 Widening (From I-95 to I-516)
- I-16 @ I-95 Interchange Reconstruction

Matt Bennett

Senior Design-Build Project Manager

Anticipated Area Classes for the Prime

Area Class:

3.05 Multi-lane Urban Interstate Limited Access Design

Anticipated Area Classes for Prime and/or Sub-consultants

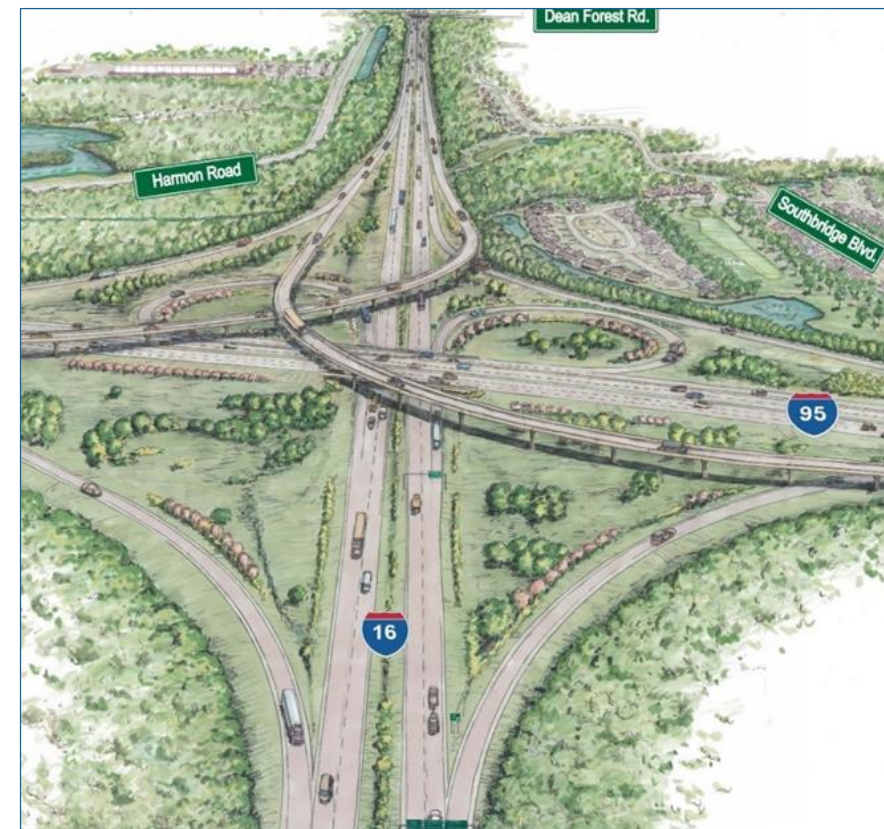
1.06(a) NEPA	3.07 Traffic Operations Design	5.07 Cartography
1.06(b) History	3.08 Landscape Architecture Design	5.08 Overhead-Subsurface Utility Engineering SUE
1.06(c) Air Quality	3.09 Traffic Control Systems Analysis, Design and Implementation	6.01a Soil Survey Studies
1.06(d) Noise	3.10 Utility Coordination	6.01b Geological and Geophysical Studies
1.06(e) Ecology	3.12 Hydraulic and Hydrological Studies (Roadway)	6.02 Bridge Foundation Studies
1.06(f) Archaeology	3.15 Highway Lighting	6.03 Hydraulic and Hydrologic Studies (Soils and Foundation)
1.06(g) Freshwater Aquatic Surveys	4.01(a) Minor Bridge and Miscellaneous Highway Structure	6.04(a) Laboratory Materials Testing
1.07 Attitude, Opinion, and Community Value Studies (Public Involvement)	4.02 Major Bridge Design	6.04(b) Field Testing of Roadway Construction Materials
1.09 Location Studies	4.04 Hydraulic & Hydrological Studies (Bridges)	6.05 Hazardous Waste Site Assessment Studies
1.10 Traffic Analysis	5.01 Land Survey	8.01 Construction Engineering and Supervision
3.02 Two-Lane or Multi-Lane Urban Roadway Design	5.02 Engineering Survey	9.01 Erosion, Sedimentation, and Pollution Control Plan
3.03 Multi-Lane Urban Roadway Widening and Reconstruction	5.03 Geodetic Surveying	9.02 Rainfall and Runoff Reporting
3.04 Multi-Lane Rural Interstate Limited Access Design	5.04 Aerial Photography	9.03 Field Inspections for Compliance of Erosion and Sedimentation Control Devices
3.06 Traffic Operations Studies	5.05 Aerial Photogrammetry	

Anticipated ROW Qualifications for Prime and/or Sub-consultants

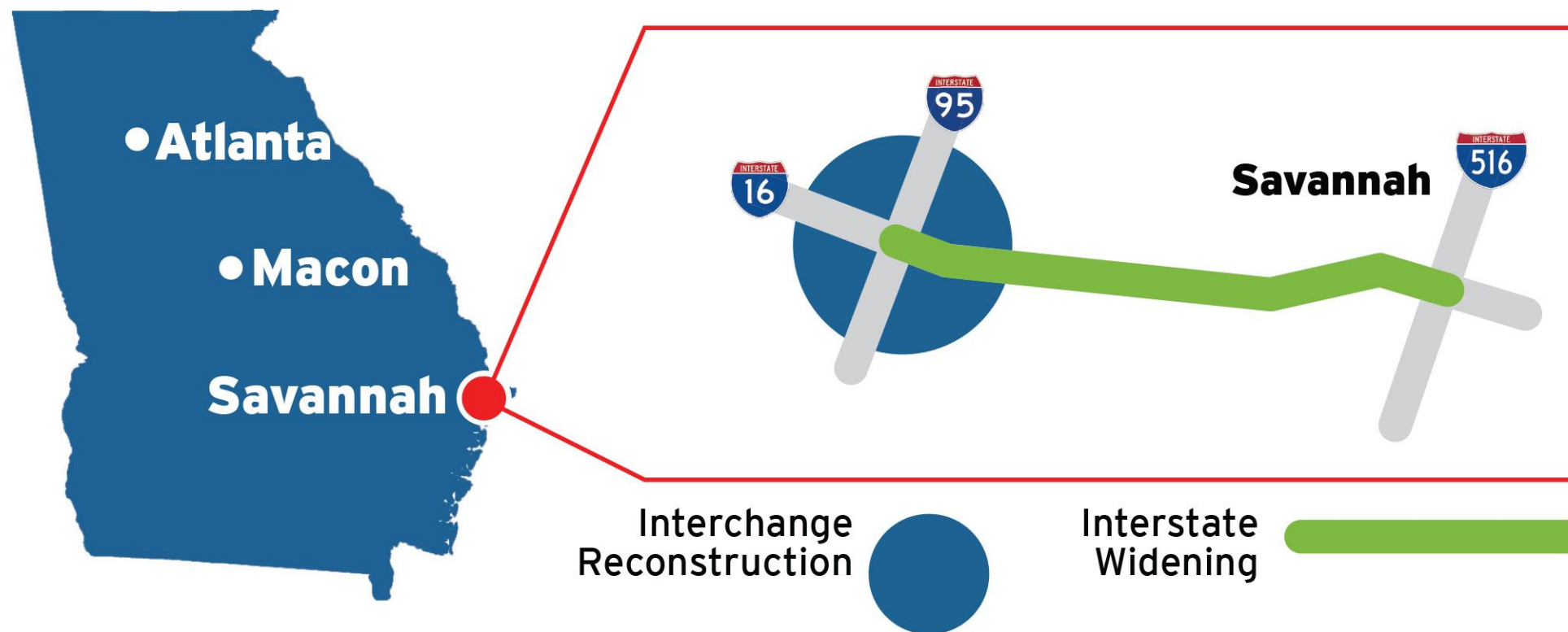
10.1.1	Conceptual Stage Study	10.3.11	Concept Team Meetings
10.1.2	Relocation (Benefits Package Preparation)	10.4.1	R/W Project Manager
10.2.1	Plan Review	10.4.2	Pre-Acquisition
10.2.2	Condemnation Preparation	10.4.3	Acquisition
10.2.4	Quit Claim Deed Preparation	10.4.4	Negotiation thru Closing
10.3.1	Appraisal Report	10.4.5	Relocation (Negotiation)
10.3.3	Cost to Cure Report	10.4.7	Interpreter
10.3.4	Trade Fixture Report	10.5.1	Asbestos Inspection
10.3.5	Sign Appraisal	10.5.2	Asbestos Abatement
10.3.6	Environmental Assessment Report	10.5.3	Demolition
10.3.7	Septic Tank/Well Estimator	10.5.4	UST Removal
10.3.8	Timber Report	10.5.5	Site Inspector
10.3.9	Detailed Cost Estimator	10.6.1	Court Coordinator
10.3.10	Preliminary Cost Estimator		

Projects Overview

- Design-Build delivery
- SRTA partnership allows for multi-year contracting
- Goals:
 - Improve traffic flow and safety at the busy I-16/I-95 interchange
 - Widen I-16 from 4 lanes to 6 lanes from I-95 to I-516 to ease congestion



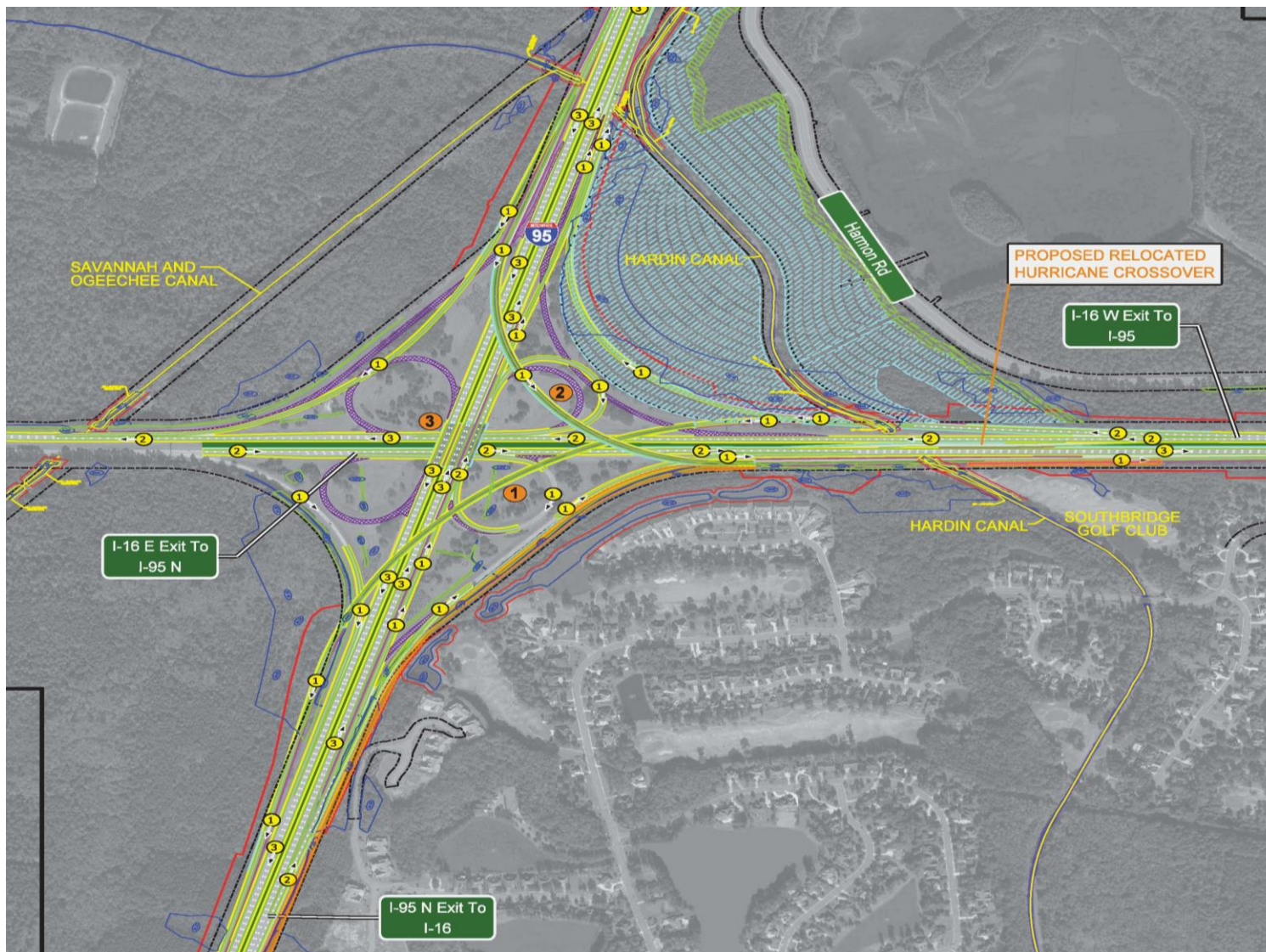
Projects Location



I-16 @ I-95 Interchange Reconstruction

- Reconstruct the existing I-16 at I-95 interchange in Chatham County
- Proposed improvements include:
 - Replacement of two loop ramps with flyover bridges:
 - I-95 Southbound to I-16 Eastbound
 - I-16 Westbound to I-95 Southbound
 - Construction of a collector-distributor (CD) lane on I-95 northbound to separate the vehicles exiting and entering from I-16
 - New interchange lighting
 - Intelligent Transportation System (ITS) technology to link to Georgia NaviGator

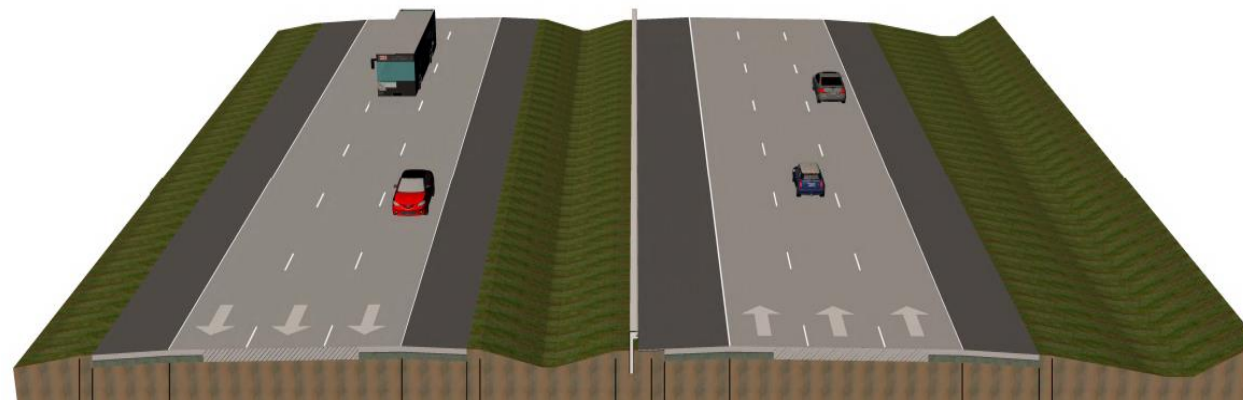
I-16 @ I-95 Interchange



I-16 Widening Project

- Widen I-16 from 4 lanes to 6 lanes from I-95 to I-516
- Proposed improvements include:
 - Add one additional general-purpose lane in each direction
 - Construct the new lanes by widening to the existing inside, grassed median
 - Cross slope correction if under 1.5%
 - Roadway drainage improvements
 - Intelligent Transportation System (ITS) technology to link to Georgia NaviGator

I-16 Widening Typical Section



I-16 looking east from east of I-95 to SR 307 (Dean Forest)



I-16 looking east from SR 307 (Dean Forest) to west of I-516

Other Notable Scope Items

- Co-location Design and Construction Phase
 - Design Location - TBD
 - Construction Location – within 5 miles of project site
- Right-of-Way acquisition services will be required
- Noise Barriers may be needed within the project corridor
- Bridge construction
 - Replacing 4 bridges (I-95 over I-16, 3 over CSX)
 - Rehabilitating 3 bridges (Dean Forest Rd, Chatham Pkwy, I-516)
 - Building 2 flyover bridges and 1 new bridge at I-516

Anticipated Project Risks

Risk	Mitigation
Existing Pavement	Pavement Evaluation to identify areas for replacement/repairs
Soils	Soil Survey to identify soil conditions and recommendations on substandard soil
Utilities	SUE QL-B was performed to identify utilities within the project limits
Right-of-Way	DB Team will be responsible for providing final ROW plans and ROW acquisition services

Design-Build Procurement Overview

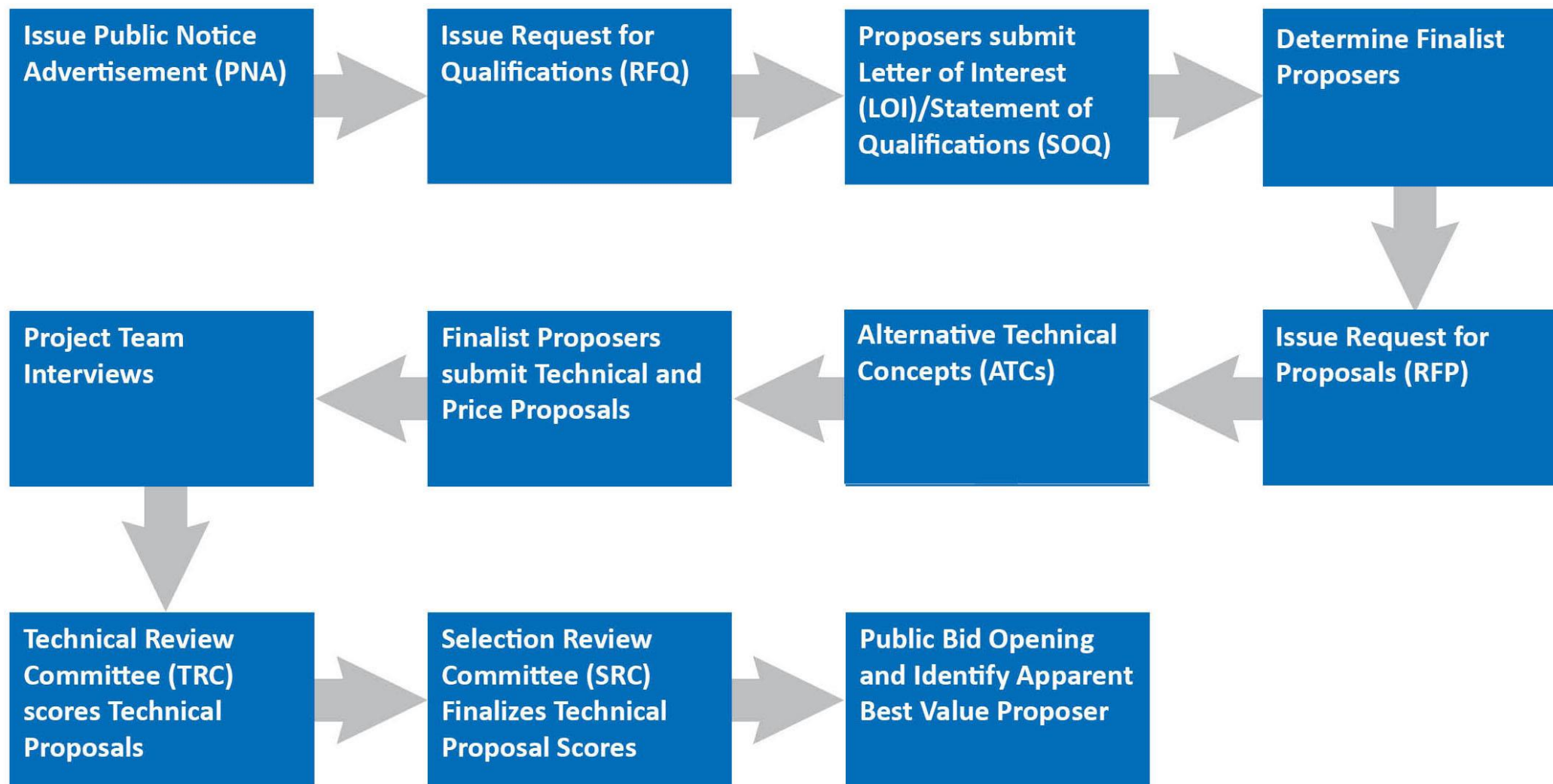
Andrew Hoenig, P.E., DBIA
Senior Design-Build Project Manager

Procurement Schedule

a. GDOT issues Public Notice Advertisement (PNA)	10/04/2017	-----
b. Industry Forum – GDOT	11/13/2017	10:00 AM
c. GDOT issues Request for Qualifications (RFQ)	11/14/2017	-----
d. Statement of Qualifications (SOQs) due	12/15/2017	2:00 PM
e. GDOT issues Request for Proposals (RFP)	01/12/2018	-----
f. Proposals due to GDOT by Proposers	05/18/2018	2:00 PM
g. Best Value Letting	06/15/2018	11:00 AM

Tentative dates listed are subject to change. Refer to RFQ.

Anticipated Best Value Procurement Process



Roles and Responsibilities

- **Design-Build Team**
 - Schedule development/management
 - Roadway and Bridge design
 - Geotechnical reports
 - Stream buffer variance application (as needed)
 - Maintain traffic, and install & maintain detour signage (as needed)
 - Utility/coordination and relocation (as needed)
 - Permit and mitigation costs
 - ROW acquisition services
 - Construction
 - Construction Inspection

Anticipated RFQ Evaluation Criteria

- **Must demonstrate required Consultant Area Classes**
- **Relevant project experience, qualifications, and availability of the:**
 - Lead Contractor Project Manager
 - Lead Consultant Project Manager
 - Engineer of Record
 - Contractor Superintendent
 - Quality Assurance Manager
 - Design Quality Assurance Manager
 - Construction Quality Assurance Manager
 - Lead Construction Inspection Manager
 - Select Key Team Leaders
- **Suitability to provide services for project**
- **Past performance**
- **Finalists 3-5 highest qualified teams**

Anticipated RFP Best Value Selection Criteria

- **Technical Proposal - 20%**
 - Technical Score is based on a 200 maximum total points.
 - Evaluation Criteria may include:
 - Construction Phasing
 - Construction Staging and Traffic Management Plan
 - Project Planning/Management and Approach
 - DBE Approach
- **Price Proposal - 80%**
 - The Price Proposal Score is based on a 800 maximum total points.

Anticipated Technical Proposal Evaluation Criteria (RFP)

- **Construction Phasing (40 points)**
 - Early opening of roadway segments
 - Acceptable project schedule/duration
- **Construction Staging and Traffic Management Plan (80 points)**
 - Less impacts to traveling public
 - Detour and Coordination planning
- **Project Planning/Management Approach (40 points)**
 - Interview
 - Technical Approach
- **DBE Approach (40 points)**
 - Achieve 16% DBE goal on the project (pass/fail)
 - Achieving DBE goal throughout life of the project
 - Utilizing DBEs in a variety of ways

Anticipated Stipulated Fee

- \$530,000 approved stipulated fee for PI 0012757 and PI 0012758
- 0.2% of the anticipated Design-Build Contract Value per Table 1.2 of the Design-Build Manual below:

Table 1.2 Stipulated Fee Amount

Design-Build Estimated Contract Value	Best Value	Two Phase Low Bid (w/ Shortlist)	Two Phase Low Bid (all qualified)	One Phase Low Bid
>\$50M	0.2 % Minimum 0.2 % Recommended	0.1 % Minimum 0.2 % Recommended	0.0 % Minimum 0.1 % Recommended	No Stipulated Fee
<\$50M	0.2 % Minimum 0.4 % Recommended	0.1 % Minimum 0.2 % Recommended	0.0 % Minimum 0.1 % Recommended	No Stipulated Fee

Stipulated Fee Requirements

In exchange for a Stipulated Fee, Proposers must turn over to the Department all project related information collected and prepared during the preparation of the price and technical proposal. This may include, but is not limited to:

- Approved Alternative Technical Concepts (ATC)
- Revised plan layouts
- Geotechnical data
- CAD files
- Detailed project schedule
- Record of correspondence with agencies

This information will be provided to the awarded Design-Build Team. The Department will also have the ability to negotiate approved ATCs from unsuccessful Proposers into the awarded Design-Build Team's contract to obtain additional value or cost savings for the Department.

Contract Template Updates



Contract Template Updates

Volume 2 & 3

- **Section 2:**

- a) Restructured Section 2 extensively
- b) Overhauled Project Management Plans subsection
- c) Incorporated improved Quality Management Requirements, including DB Team responsibility for 100% QA/QC; clarified Roles and Responsibilities
- d) Expanded the Progress and Payments subsection
- e) Integrated previous Section 3 (Public Outreach) into a new subsection

Volume 2 & 3

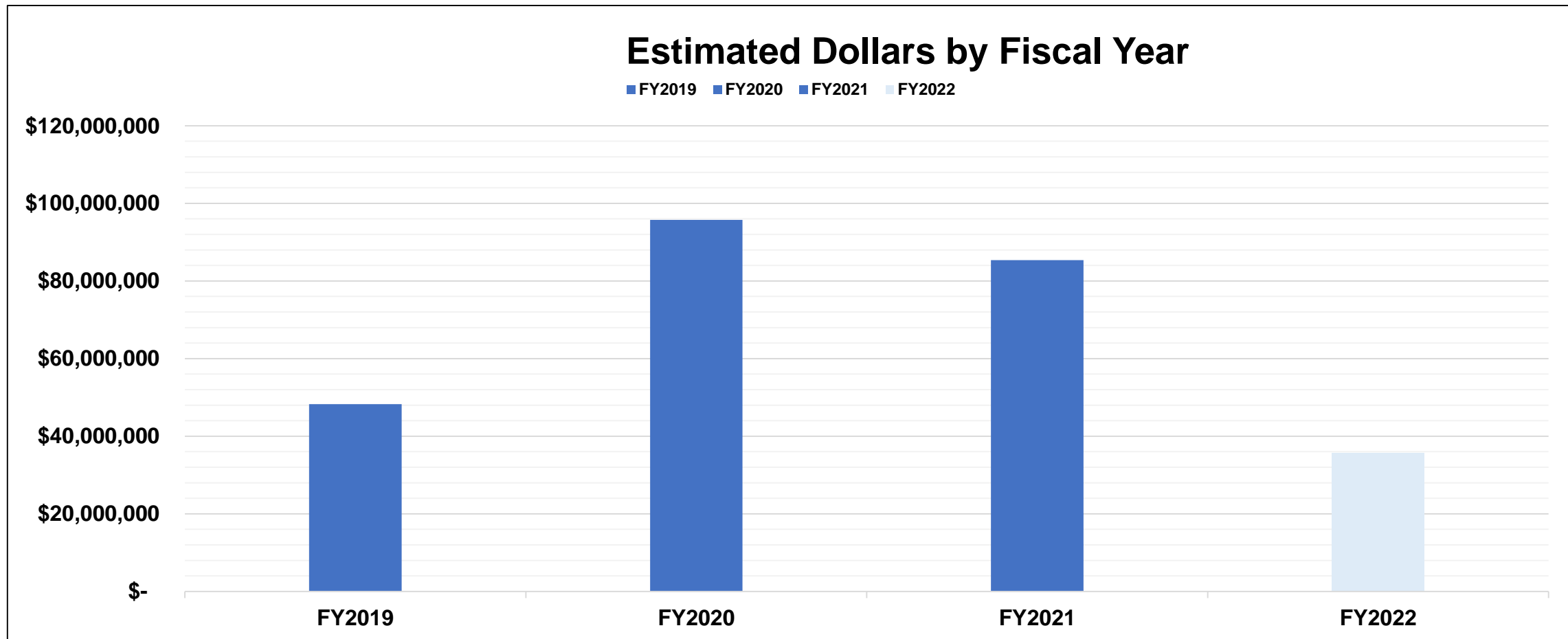
- **Section 3:**

- a) Moved Public Outreach into Section 2
- b) Clarified GDOT, PMC and DB Team Roles/Responsibilities
- c) Deleted Volume 3B Manuals and made it an attachment to Section 3

Multi Year DB Contracting

- Multi Year DB Contract will be administered through SRTA
- The DB Contract will specify the available funds per Fiscal Year in the RFP so the DB Team can accurately develop its schedule
- The DB Contract will instruct the DB Team that it is **NOT** to encumber debt under this contracting method
- The DB Team will be required to sign an acknowledgment of understanding for this method of contract with the Technical Proposal submittal
- The DB Team's schedule shall always track below the available cumulative funds for the project.

Multi Year DB Contracting



Note: Funding in FY 22 to be determined based on the proposal fee.

Questions & Answers

Program Information and Contract Opportunities:
www.dot.ga.gov/PS/Innovative

MMIP Program Information



www.dot.ga.gov/MMIP



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@GADeptofTrans



@gadeptoftrans

